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(57)Abstract:<BR>
PROBLEM TO BE SOLVED: To obtain URL information of a TV program, which is
correctly synchronized with a TV program under viewing through the use of a
client device, even if there is a change exists in the broadcasting schedule of
the TV program in a TV program Web site retrieving system which is constituted of
the client device for requesting URL information related to the TV program and a
server unit for providing the URL information concerning the
request.<BR>SOLUTION: By successively changing a TV program database constituted
of categories of URL information related to the TV broadcasting program in the
server unit, when the TV broadcasting is changed, the client device requests the
URL information related to the TV broadcasting program being viewed at present to
the server unit and obtains URL information which is synchronized correctly with
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<BR><BR><HR>CLAIMS
<HR>[Claim(s)]

<BR>[Claim 1]
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The client equipment which receives television broadcasting, and can view and listen to a TV program,
In the TV program homepage retrieval system which consists of server equipment which is connected in said client equipment and network and offers the URL information relevant to said TV program
While it has the database of the URL information relevant to said TV program and said client equipment gives an acquisition demand of the URL information relevant to said TV program under viewing and listening to said server equipment, said server equipment
While said server equipment performs offer of the URL information relevant to the program to which said client equipment is viewing and listening according to an acquisition demand of said URL information on said client equipment based on said database
Said client equipment is a TV program homepage retrieval system characterized by displaying said URL information acquired from said server equipment on the display screen of the TV program to which it views and listens.

[Claim 2]

It is client equipment which receives television broadcasting, and can view and listen to a TV program.
Said client equipment has the directions means for performing an acquisition demand of a demand setting means to set up the acquisition requirements of the URL information to which said TV program relates, and said URL information.
An acquisition demand of said URL information relevant to the TV program under viewing and listening based on the acquisition requirements set up with said conditioning means
Client equipment characterized by what is displayed on the display screen of said TV program which views and listens to this acquired URL information while carrying out to the server equipment which has the database of the URL information relevant to said TV program via a network with directions of said directions means.

[Claim 3]

Said directions means is client equipment according to claim 2 characterized by performing an acquisition demand of said URL information to said server equipment by one directions actuation.

[Claim 4]

Said demand setting means is client equipment according to claim 2 characterized by the ability to perform a setup which performs an acquisition demand of the URL information on the genre which is choosing said URL information relevant to the program of television broadcasting from two or more genres, and was chosen to said server equipment.

[Claim 5]

Said demand setting means is claim 2 and the client equipment of four publications which are characterized by the ability to perform a setup for which it opted, and which performs an acquisition demand of said URL information to said server equipment for every time amount.

[Claim 6]

Said demand setting means is claims 2 and 4 and the client equipment of five publications which are characterized by the ability to perform a setup which performs an acquisition demand of said URL information to said server equipment for every voice change of said television broadcasting.

[Claim 7]

It is server equipment which offers the URL information relevant to the TV program of television broadcasting. Said server
The broadcasting station database which specifies the TV program to which it is viewed and listened according to an acquisition demand of the URL information relevant to said TV program from the client equipment which can view and listen to the TV program of said television broadcasting,
While it has the program information database in which the URL information relevant to said TV program is retrieved and said TV program database consists of URL information on two or more genres related according to a time zone at a TV program

Server equipment characterized by changing the contents of said program information database serially when the program of said television broadcasting has modification.

<HR>DETAILED DESCRIPTION
<HR>[Detailed Description of the Invention]

[0001]

[Field of the Invention]

This invention is a technique about the system with which the homepage information on the Internet relevant to a TV program is retrieved, can access especially networks, such as a personal computer, and relates to the system constituted by the information processor equipped with the television tuner, and the information processor which offers said homepage information.

[0002]

[Description of the Prior Art]

The Internet is accessed in recent years, it is becoming general to perform perusal of a homepage and use of an electronic mail by the web browser, and many homepages relevant to the program broadcast on television under such circumstances are also established increasingly.

[0003]

As an approach of introducing URL (uniform resource locator) of the homepage to which such a TV program relates conventionally to the viewer of a TV program, a telop is passed on the televising screen of a TV program, or approaches, such as reading out URL with voice, are used.
However, URL of a homepage consists of enumerations of the alphabet and it has become a very complicated and troublesome activity to take a memorandum by the viewer side of a TV program.
Moreover, since it was not necessarily introduced in detail even if the homepage relevant to a TV program existed, it was in the condition which cannot be said that sufficient environment accessed to the above-mentioned homepage simply for a viewer is prepared.

[0004]

In order to solve such a problem, in JP,10-177532,A, the television race card data which consist of URL information on the homepage relevant to each TV program are beforehand stored in storage means, such as a client computer, the channel information and these data under viewing and listening are compared, and the technique which displays the screen of a homepage shown by URL corresponding to the TV program on a television screen and coincidence is indicated.

[0005]

[Problem(s) to be Solved by the Invention]

However, since the television race card data which consist of URL relevant to each TV program are beforehand incorporated for the storage means of a client computer in order to search with the above-mentioned conventional technique the homepage of the TV program which a viewer needs, when the contents of broadcast by which current broadcast is carried out, and the contents of the television race card data incorporated beforehand are not in agreement, a problem occurs. That is, when the time zone of a TV program is changed under a certain effect or exchange of the broadcast frame of a TV program is performed, the homepage which was mistaken, without being in agreement with the above-mentioned television race card data will be displayed.
As most familiar example, by extension of a professional baseball relay broadcast, there is an example in which the program after it is carried down, and such an example is generated daily.
Moreover, if it is going to display the homepage relevant to a TV program in such a case, since URL will be searched based on the contents of the television race card data incorporated beforehand, there is a problem which the homepage which a viewer desires may not be displayed and spoils user-friendliness.

[0006]

[Means for Solving the Problem]

The client equipment which the TV program homepage retrieval system of this invention receives television broadcasting, and can view and listen to a TV program in order to solve the above-mentioned problem,
Connect with this client equipment in a network, and it consists of server equipment which has the database of the URL information relevant to said TV program.
While said client equipment gives an acquisition demand of the URL information relevant to said TV program under viewing and listening to said server equipment
While said server equipment performs offer of the URL information relevant to the program to which said client equipment is viewing and listening according to an acquisition demand of said URL information on said client equipment based on said database
It is characterized by said client equipment displaying said URL information acquired from said server equipment on the display screen of the TV program to which it views and listens.

[0007]

Moreover, the client equipment which constitutes the TV program homepage retrieval system of this invention is client equipment which receives television broadcasting, and can view and listen to a TV program.
It has the directions means for performing an acquisition demand of a demand setting means to set up the acquisition requirements of the URL information to which said TV program relates, and said URL information.
An acquisition demand of said URL information relevant to the TV program under viewing and listening based on the acquisition requirements set up with said conditioning means
While carrying out to the server equipment which has the database of the URL information relevant to said TV program via a network with directions of said directions means, it is characterized by what is displayed on the display screen of said TV program which views and listens to this acquired URL information.

[0008]

Moreover, the client equipment which constitutes the TV program homepage retrieval system of this invention is characterized by having said directions means to perform an acquisition demand of said URL information to said server equipment, by one directions actuation.

[0009]

Moreover, the client equipment which constitutes the TV program homepage retrieval system of this invention is characterized by having said demand setup instruction means which can perform a setup which performs an acquisition demand of the URL information on the genre which chose said URL information relevant to the program of television broadcasting to said server equipment by choosing from two or more genres.

[0010]

Moreover, the client equipment which constitutes the TV program homepage retrieval system of this invention is characterized by having said demand setting means which can perform a setup for which it opted, and which performs an acquisition demand of said URL information to said server equipment for every time amount.

[0011]

Moreover, the client equipment which constitutes the TV program homepage retrieval system of this invention is characterized by having said demand setting means which can perform a setup which performs an acquisition demand of said URL information to said server equipment for every voice change of said television broadcasting.

[0012]

The server equipment which constitutes the TV program homepage retrieval system of this invention is server equipment which offers the URL information relevant to the TV program of television broadcasting. Moreover, said server
The broadcasting station database which specifies the TV program to which it is viewed and listened according to an acquisition demand of the URL information relevant to said TV program from the client equipment which can view and listen

to the TV program of said television broadcasting,
While it has the program information database in which the URL information relevant to said TV program is retrieved and said TV program database consists of URL information on two or more genres related according to a time zone at a TV program
When the program of said television broadcasting has modification, it is characterized by changing the contents of said program information database serially.

[0013]

[Embodiment of the Invention]

One gestalt of operation of this invention is explained using a drawing below. The TV program homepage retrieval system of this invention is used with the gestalt to which client equipment and server equipments, such as a personal computer, were connected in networks, such as the Internet.
<A
HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000003"
TARGET="tjitemdrw">Drawing 1</A>
is the functional block diagram of the server equipment which constitutes the TV program homepage retrieval system of this invention.
The server equipment of this invention consists of databases 109 for retrieval, such as the modem 107 used as CPU100, the keyboard 105 as the stores 103, such as ROM101, RAM102, and a hard disk, a display unit 104, and an input device, and the end connection of a mouse 106 and a network, the database 108 for broadcasting station specification, and Program URL.
CPU100 manages control of the whole server equipment.
ROM101 has memorized the various programs and fixed data which are used with server equipment, and these parts are used, loading to RAM102.
Various programs and data are used for RAM102, loading to it.
Various programs and data are memorized and the stores 103, such as a hard disk, are used, loading to RAM102.
A display unit 104 displays various information using a liquid crystal display etc.
A keyboard 105 and a mouse 106 are used as an input unit which receives the input of a key input Sagitta label etc.
A modem 107 is used for data transmission and reception with external instruments, such as client equipment, through a network.
The database 108 for broadcasting station specification is used for pinpointing a broadcasting station by the area code or the channel.
The databases 109 for retrieval, such as Program URL, are used for retrieving information, such as URL about the TV program to which a client is viewing and listening from time time amount, after a broadcasting station is pinpointed.

[0014]

<A
HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000004"
TARGET="tjitemdrw">Drawing 2</A>
is the functional block diagram of the client equipment which constitutes the TV program homepage retrieval system of this invention.
The client equipment of this invention consists of a keyboard 205, a mouse 206 and a modem 207, the remote control light sensing portion 208, a panel switch 209, a tuner 210, the display controller 211, a frame buffer 212, a voice decoder 213, and a loudspeaker 214 as the stores 203, such as CPU200, and ROM201, RAM202, a hard disk, a display unit 204, and an input device.
CPU200 manages control of the whole client equipment.
ROM201 has memorized the various programs and fixed data which are used with client equipment, and these parts are used, loading to RAM202.
It is used for various programs or data by RAM202, loading.
Various programs and data are memorized and the stores 203, such as a hard disk, are used, loading to RAM202.
A display unit 204 displays various information using a liquid crystal display etc.
A keyboard 205 and a mouse 206 are used as an input unit which receives the input

of a key input Sagitta label etc.
A modem 207 is used for data transmission and reception with external instruments, such as server equipment, through a network.
The remote control light sensing portion 208 and a panel switch 209 are the user interface parts for operating client equipment, such as performing the directions input for operating a tuner 210.
A keyboard 205 and a mouse 206 can also perform said directions input.
A tuner 210 receives a television electric wave through an antenna.
The display controller 211 recovers the video signal of the channel by which the current channel selection is carried out from the electric wave received by the tuner 210.
A frame buffer 212 compounds and generates the broadcast image to which it restored by the display controller 211, and the data which formed into image data the character string generated within the client equipment of this invention.
The voice decoder 213 recovers voice data from the television electric wave received by the tuner 210.
A loudspeaker 214 outputs voice data.

[0015]

<A HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000005" TARGET="tjitemdrw">Drawing 3</A>
is the external view of the front face of the display unit 204 which constitutes the client equipment of this invention.
The service selection key 301 prepared in the front face of this display is an example of the key for starting actuation of the client equipment of this invention with which URL of the homepage relevant to the TV program under viewing and listening is searched, and is also one of the panel switches 209 shown by <A HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000004" TARGET="tjitemdrw">drawing 2</A>
.
Moreover, that the same actuation uses remote control can also start the above-mentioned actuation.

[0016]

It has the above-mentioned configuration and the acquisition approach of the URL information on the homepage in the TV program homepage retrieval system of this invention is explained.
<A HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000006" TARGET="tjitemdrw">Drawing 4</A>
is a flow chart which shows the processing which acquires the URL information on the homepage relevant to the TV program in the client equipment of this invention.
The client equipment of this invention is pressing the service selection key 301 in the condition of displaying the program of television broadcasting, and directions of URL retrieval of the homepage relevant to the TV program to which it is viewing and listening are issued (S401).
According to these directions, client equipment creates the request command to server equipment (S402).
The contents of service requested from the area code and server equipment in which the channel and viewing-and-listening area of a broadcasting station under reception to which it is viewing and listening when the service selection key 301 is pressed are shown are included in this request command.
The channel information on the broadcasting station under reception is acquired from a tuner 21.
Moreover, an area code shall be classified according to the area of television broadcasting offices all over the country to which it can be viewed and listened, and the area code for every client equipment shall be chosen and set up with client equipment from the chart beforehand set up by the server equipment side.
Moreover, the genre of the URL information currently beforehand prepared by the

server equipment side also about the contents of service can be chosen and set up.
With a genre here, on for example, the request setting screen shown in
<A HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000007" TARGET="tjitemdrw">drawing 5</A>
(1) URL acquisition of the homepage of the program itself which the program has established, URL acquisition of the homepage of the sponsors (company etc.) who sponsor (2) programs,
(3) URL acquisition of a performer's own homepage who is appearing on the program,
(4) The contents which could consider acquisition (mail address etc.) of the information on other etc., set up the genre of URL information to acquire by choosing from these, and were set up when the service selection key 301 was pressed are reflected in a request command.
Next, the software for Internet connectivities starts and the request command which is the request information on service that the URL information on the homepage relevant to the TV program under current viewing and listening is retrieved by connecting with a network to the server equipment of this invention is sent (S403).

[0017]

On the other hand, the server equipment of this invention
A broadcasting station from the area code and channel of the contents shown in
<A HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000009" TARGET="tjitemdrw">drawing 7</A>
The databases 109 for retrieval, such as the program URL which consists of various URL information on the homepage related for every program of the television race card broadcast at each broadcasting station of the contents shown in the database 108 for broadcasting station specification and
<A HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000010" TARGET="tjitemdrw">drawing 8</A>
for specifying, are stored.
If modification goes into the broadcast schedule of each broadcasting station, maintenance shall be performed so that the contents of broadcast which add modification and are always carrying out the present progressive to said database 109, and said database 109 may be in agreement.
As one of the approaches of incidentally maintaining said database 109
Although each broadcasting station is accessing to the server equipment of this invention if modification of the broadcast schedule of a program and the alteration of a program occur, entering a user name, a password, etc., and acquiring authentication and it can carry out by correcting the part relevant to the program of the local station of said database 109
What is necessary is just the approach which is not limited to this but can correct said database 109 according to modification of the broadcast schedule of a program, or the alteration of a program.

[0018]

<A HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000008" TARGET="tjitemdrw">Drawing 6</A>
is a flow chart which shows the processing which offers the URL information on the homepage relevant to the TV program in the server equipment of this invention.
If the request command transmitted from client equipment as an offer demand of the URL information on the homepage relevant to a TV program is received (S601), the server equipment of this invention is searching the database 108 for broadcasting station specification based on the channel and area code which are

contained in a request command, and pinpoints the broadcasting station to which it is viewed and listened with client equipment (S602).
The area code was beforehand classified according to the television broadcasting area according to the server equipment side, and the client equipment side has set up the area code corresponding to a place-of-residence region.
Moreover, this area code may divert the area code currently used on television (on television, it has the function in which the channel automatically based on that area code can be set up, by putting in an area code).
For example, since a channel will serve as the Mainichi Broadcasting System by 61 (Osaka) if the area codes of client equipment are 4ch(es), if said area code and channel information are set to said request command, server equipment can pinpoint the broadcasting station to which it is viewing and listening with client equipment.
Next, server equipment searches the databases 109 for retrieval, such as the program URL which consists of various URL information on the homepage related for every program of the television race card broadcast at each broadcasting station of the contents shown in
<A
HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000010"
TARGET="tjitemdrw">drawing 8</A>
based on the present time, and specifies the URL information demanded from client equipment (S603).
It transmits to client equipment by making a retrieval result into a response message at the last (S604).
A retrieval result and the corresponding URL information are included in a response message.

[0019]

next -- < -- A HREF -- = -- " -- /-- Tokujitu/tjitemdrw . -- ipdl?N -- 0000 -- = -- 237 -- & -- N -- 0500 -- = -- one -- E_N -- /--; -- > --; -- > -- < -- : -- 98 -- > -- /-- /-- /-- & -- N -- 0001 -- = -- 432 -- & -- N -- 0552 -- = -- nine -- & -- N -- 0553 -- = -- 000006 -- " -- TARGET -- = -- "tjitemdrw" -- > -- drawing 4 -- being shown -- as -- a client -- equipment -- a server -- equipment -- transmitting -- having had -- a response -- a message -- receiving (S404) .
Client equipment will create character strings, such as URL displayed on the display unit 204 of client equipment based on a response message, by RAM202, if this response message is received (S405).
The character string created by RAM202 is compounded with the image of the television broadcasting to which it is viewing and listening as image data in the frame buffer 212, and is displayed on a display unit 204 (S406).
After character strings, such as said URL, indicate by fixed time amount, they are eliminated and return to the image display of the usual television broadcasting.
Although
<A
HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000011"
TARGET="tjitemdrw">drawing 9</A>
is an example of the contents of a display, it is not limited to this, and a viewer just recognizes it.
Moreover, said acquired URL information is memorized to the store of client equipment, and you may enable it to use it when accessing a homepage separately.
In the above procedure, from server equipment, client equipment can acquire URL of the homepage relevant to the TV program under viewing and listening, and can display URL information.
Moreover, the time amount which requests URL information over server equipment on the request setting screen shown in
<A
HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000007"
TARGET="tjitemdrw">drawing 5</A>
can be set up.
For example, if time setting is carried out to "every 60 minutes" and

condition "it is start time 12:00", while viewing and listening to a TV program, URL information can be automatically requested to server equipment by the time basis and time amount which were set up.
Or although the commercial cut function is realized between the program of television broadcasting, and commercials with VTR using the change rate of a sound signal, a setup which a sound signal switches and sometimes requests URL information automatically to server equipment can also be performed with the client equipment of this invention.
In this setup, the voice decoder 213 detects the change rate of a sound signal, URL information can be automatically requested to server equipment (monophonic recording <- -> stereo, one language <--> two languages, etc.), and they can also acquire URL information.

[0020]

[Effect of the Invention]

According to the TV program homepage retrieval system of this invention, as explained in full detail above
As opposed to the URL information on the homepage relevant to the TV program required of real time from client equipment (for example, URL information on the homepage about the homepage, sponsor, and performer who are established in the program etc.)
Since the newest URL information always is offered from a database because, as for server equipment, oneself maintains a database, the user of client equipment can acquire the URL information relevant to the TV program to which it is always viewing and listening, without being influenced by broadcast reschedule of a TV program.

[0021]

Moreover, since according to the client equipment of this invention it chooses from the contents which suited for the purpose of the URL information relevant to a TV program and an acquisition demand of URL information can be directed, the URL information needed on the TV program to which it is viewing and listening is acquirable.

[0022]

Moreover, according to the client equipment of this invention, since acquisition of direct URL information can be directed easily [when a user is required] during viewing and listening of a TV program, it can be operated that there is nothing to viewing and listening of a television screen inconvenient.

[0023]

Moreover, the URL information on the homepage relevant to the TV program under viewing and listening can be known, without barring viewing and listening of a television screen, since according to the client equipment of this invention URL information is acquired automatically and it displays for every set-up time amount, even if it does not direct an acquisition demand of URL information.

[0024]

Moreover, the URL information on the homepage relevant to the TV program under viewing and listening can be known, without barring viewing and listening of a television screen, since according to the client equipment of this invention URL information is acquired and it displays automatically at the time of a voice change-over of a TV program, even if it does not direct an acquisition demand of URL information.

[0025]

Moreover, according to the server equipment of this invention, the exact URL information according to the TV program to which it is viewed and listened with client equipment can be offered by maintaining the TV program database which consists of URL information relevant to the TV program accompanying broadcast modification of a TV program at any time.

<HR>DESCRIPTION OF DRAWINGS
<HR>[Brief Description of the Drawings]

<A
HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.

ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000003"
TARGET="tjitemdrw">[Drawing 1]</A>

It is the functional block diagram of the server equipment of this invention.

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HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.
ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000004"
TARGET="tjitemdrw">[Drawing 2]</A>

It is the functional block diagram of the client equipment of this invention.

<A
HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.
ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000005"
TARGET="tjitemdrw">[Drawing 3]</A>

It is the external view of the front face of a display of the client equipment of this invention.

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HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.
ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000006"
TARGET="tjitemdrw">[Drawing 4]</A>

It is a flow chart explaining processing of the client equipment of this invention of operation.

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HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.
ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000007"
TARGET="tjitemdrw">[Drawing 5]</A>

It is the example of a request setting screen of the URL information acquisition demand in the client equipment of this invention.

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HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.
ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000008"
TARGET="tjitemdrw">[Drawing 6]</A>

It is a flow chart explaining processing of the server equipment of this invention of operation.

<A
HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.
ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000009"
TARGET="tjitemdrw">[Drawing 7]</A>

It is the example of logical construction of the database for pinpointing a broadcasting station from the area code in server equipment and frequency of this invention.

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HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.
ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000010"
TARGET="tjitemdrw">[Drawing 8]</A>

It is the example of logical construction of the database incorporating the various URL information relevant to the race card and this race card which are broadcast at each broadcasting station in the server equipment of this invention.

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HREF="http://www4.ipdl.inpit.go.jp/cgi-bin/tran_web_cgi_ejje?u=http%3A%2F%2Fwww4.
ipdl.inpit.go.jp%2FTokujitu%2Ftjitemdrw.ipdl%3FN0000%3D237%26N0500%3D1E%5FN%2F%3B
%3E%3B%3E%3C%3A98%3E%2F%2F%2F%26N0001%3D432%26N0552%3D9%26N0553%3D000011"
TARGET="tjitemdrw">[Drawing 9]</A>

It is the example of a display of the acquired URL information which is displayed on the display screen of the client equipment of this invention.

[Description of Notations]

100 CPU

101 ROM

102 RAM

103 Storage

104 Display Unit

105 Keyboard

106 Mouse

107 Modem

108 DB for Broadcasting Station Specification

109 DB(s) for Retrieval, Such as Program URL

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